REMARKS

Applicants acknowledge with appreciation the allowance of claims 1-17 and 20. Claim 19 has been amended as requested by the Examiner. New claims 24-64 (i.e., claims 24-37 are directly or indirectly dependent on claim 21, claims 38-50 are directly or indirectly dependent on claim 22, and claims 51-64 are directly or indirectly dependent on claim 23) have been added to more particularly define Applicants' claimed invention. Basis for new claims 24-64 can be found in original claims 2-19 of Applicants' specification.

The rejection of claim 19 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention, is respectfully traversed.

In view of the amendment of claim 19, this rejection is deemed improper and should be withdrawn.

The rejection of claims 21-23 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 6,175,027 is respectfully traversed.

In regard to claims 21 and 22, claim 21 incorporates the subject matter of original claims 1, 15 and 18, and claim 22 incorporates the subject matter of original claims 1, 6 and 18. Neither claim 15 nor claim 6 was rejected by the Examiner under the above rejection using the '027 patent in the Office Action dated January 17, 2006. In regard to claim 23, claim 23 incorporates the subject matter of original claims 1 and 17. In the Office Action dated January 17, 2006, claim 17 was objected to by the Examiner as being "dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims".

It is therefore submitted that the '027 patent does not anticipate claims 21-23. In view of the above arguments, this rejection is deemed improper and should be withdrawn.

The rejection of claims 21-23 under 35 U.S.C. 103(a) as being unpatentable over Balboni et al., Inorganic Chemistry, Vol. 40, No. 26, pp. 6588-6597 (2001) is respectfully traversed.

Claims 21 and 22 are discussed below. In regard to claim 23, claim 23 incorporates the subject matter of original claims 1 and 17. In the Office Action dated January 17, 2006, claim 17 was objected to by the Examiner as being "dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims". It is therefore submitted that Balboni et al. does not render obvious claim 23.

The Balboni et al. reference discloses a one pot method for the preparation of a series of bisindenyldimethylmetallocenes carried out by reacting a π- ligand with a 2-fold excess of MeLi, and then $MtCl_4$ (Mt = Ti, Zr, Hf). As noted by the Examiner in the Office Action, Balboni et al. does not disclose large scale methods for preparation of the bisindenyldimethylmetallocenes. The bisindenyldimethylmetallocenes of Balboni et al. are catalyst precursors for methylmetallocenium/borate catalyst systems for olefin polymerization.

Nowhere does the Balboni et al. reference disclose or suggest a one pot method for the large scale production of an organometallic compound selected from a transition metal-containing amide, a transition metal-containing alkoxide, a transition metal-containing diketonate, transition metal-containing cyclopentadienides or a transition metal-containing imide as claimed by Applicants. Any correlation between the methods used to produce on a small scale the bisindenyldimethylmetallocenes of the Balboni et al. reference and the one pot, large scale method used by Applicants to produce transition metal-containing amides, transition metal-containing alkoxides, transition metal-containing diketonates, transition metal-containing cyclopentadienides and

transition metal-containing imides is totally speculative and without scientific or engineering basis.

Indeed, the Balboni et al. reference actually teaches away from Applicants' claimed invention because the synthesis described therein is conducted on a small scale – not a large scale as required by Applicants' claimed invention. As is evident to a person skilled in the art, the scaling up of a process from small scale to large scale is fraught with unforeseen difficulties and problems. Not every small scale process can be scaled up to a large scale process.

For example, mass transfer, heat transfer and chemical kinetics are some of the factors that require careful consideration when scaling up a production process. The manner (e.g., quantities and order) in which the reactants are introduced into the large scale one pot process could result in concentration gradients leading to reaction conditions less suitable for desired organometallic compounds; inadequate mixing of the reactants could result in concentration gradients leading to reaction conditions less suitable for desired organometallic compounds; inadequate removal of heat of reaction and/or inadequate rate of heat removal could result in undesirable reaction mixture temperature leading to reaction conditions less suitable for desired organometallic compounds. The complexity of such difficulties and problems and the solutions thereto can extend well beyond the skill of a person of ordinary skill in the art to a person of extraordinary skill in the art.

Applicants submit that alleged obviousness of the instantly claimed invention must be predicated on something more than it would have been obvious to try scaling up the small scale synthesis of bisindenyldimethylmetallocenes of Balboni et al. to a large scale production of organometallic compounds selected from transition metal-containing amides, transition metal-containing alkoxides, transition metal-containing diketonates, transition metal-containing cyclopentadienides or transition metal-containing imides in order to arrive at

Applicants' claimed one pot method for the large scale production of organometallic compounds or the possibility that such particularly defined one pot method for the large scale production of organometallic compounds would have been considered in the future, having been neglected in the past. See Ex parte Argabright et al. 161 USPQ 703. It is submitted that "obvious to try" is not a valid test of patentability, and patentability determinations based on that as a test are contrary to statute. See In re Mercier 515 F2d 1161, 185 USPQ 774; In re Antonie 559 F2d 618, 195 USPQ 6; In re Goodwin et al. 576 F2d 375, 198 USPQ 1; and In re Tomlinson et al. 363 F2d 928, 150 USPQ 623.

Clearly, it is only by hindsight that the Examiner could impute to the small scale synthesis of bisindenyldimethylmetallocenes of Balboni et al. the large scale production of organometallic compounds selected from transition metal-containing amides, transition metal-containing alkoxides, transition metal-containing diketonates, transition metal-containing cyclopentadienides or transition metal-containing imides to arrive at the instantly claimed one pot method for the large scale production of organometallic compounds, and such hindsight obviousness after the invention has been made is not the proper test. See In re Carroll 601 F2d 1184, 202 USPQ 571. As indicated above, Balboni et al. actually teaches away from Applicants' claimed invention because the synthesis described therein is conducted on a small scale – not a large scale as required by Applicants' claimed invention.

Clearly the Balboni et al. reference does not render obvious claims 21-23. In view of the above arguments, this rejection is deemed improper and should be withdrawn.

It is respectfully submitted that the rejections of record are improper and that the application is in condition for allowance. Accordingly, reconsideration and allowance of all claims are courteously solicited.

D-21358

A response to the Office Action mailed October 26, 2006 is due January 26, 2007. Please charge any fees/surcharge which may be required by this paper, or credit any overpayment, to Deposit Account No. 16-2440.

Respectfully submitted,

Gerald L. Coon
Reg. No. 29910
Attorney for Assignee

Danbury, Connecticut 06810-5113
(203) 837-2292
January 23, 2007
Attorney Ref.: D-21358